In the Claims

Please amend claim 1 as follows:

1. (Currently amended) A tool-less blade clamping apparatus for a reciprocating tool of the type which has a reciprocating plunger with at least one radially oriented aperture and a blade receiving slot at its forward end for receiving a blade of the type which has a shank portion with a hole and at least one outwardly extending shoulder between the distal end of the shank and a blade portion, the shank being configured to be inserted in the slot, the apparatus being configured to be attached to the plunger and having an opening for receiving the blade shank therein and in the slot, said apparatus comprising:

said apparatus having an unclamped position and a clamped position wherein the shank portion of the blade can be inserted into said opening when it is in said unclamped position and be securely retained therein when in said clamped position;

said apparatus being biased toward said clamped position;

said apparatus being configured ~~operable~~ to maintain its unclamped position when placed in said unclamped position;

said apparatus being released when the at least one shoulder of the blade shank portion engages said apparatus as the shank portion is inserted into said opening and slot a predetermined distance to thereby place said apparatus in said clamped position;

said apparatus engaging the at least one shoulder and pushing the blade shank portion outwardly when said apparatus is moved to said unclamped position.

2. (Original) A clamping apparatus as defined in claim 1 further comprising at least one spring biasing said apparatus toward said clamped position.

3. (Original) A clamping apparatus as defined in claim 1 further comprising:

a releasable retaining mechanism for holding said apparatus in its unclamped position when placed in said unclamped position;

said retaining mechanism being released when the blade shank portion is inserted into said opening and slot a predetermined distance to thereby place said clamping apparatus in said clamped position;

said clamping apparatus pushing the blade shank portion outwardly there-from when said retaining mechanism is moved to said unclamped position.

4. (Previously presented) A tool-less blade clamping apparatus for a reciprocating tool of the type which has a reciprocating plunger with at least one radially oriented aperture and a blade receiving slot at its forward end for receiving a blade of the type which has a shank portion with a hole and at least one outwardly extending shoulder between the distal end of the shank and a main portion, the shank being configured to be inserted in the slot, the apparatus being configured to be attached to the plunger and having an opening for receiving the blade shank therein and in the slot, said apparatus comprising:

said apparatus having an unclamped position and a clamped position wherein the shank portion of the blade can be inserted into said opening when it is in said unclamped position and be securely retained therein when in said clamped position;

at least one spring biasing said apparatus toward said clamped position;

a releasable retaining mechanism for holding said apparatus in its unclamped position when placed in said unclamped position;

said retaining mechanism being released when the at least one shoulder of the blade engages said apparatus as the blade shank portion is inserted into said opening and slot a predetermined distance to thereby place said clamping apparatus in said clamped position;

said clamping apparatus engaging the at least one shoulder and pushing the blade shank portion outwardly therefrom when said retaining mechanism is moved to said unclamped position.

5. (Previously presented) A tool-less blade clamping apparatus for a reciprocating tool of the type which has a reciprocating plunger with a cylindrical end portion and at least one radially oriented aperture and a blade receiving slot at its forward end for receiving a blade of the type which has a shank portion with a hole and at least

one outwardly extending shoulder between the distal end of the shank and a main portion, the shank being configured to be inserted in the slot, the apparatus being configured to be attached to the plunger and having an opening for receiving the blade shank therein and in the slot, said apparatus comprising:

said apparatus having an unclamped position and a clamped position wherein the shank portion of the blade can be inserted into said opening when it is in said unclamped position and be securely retained therein when in said clamped position;

at least one spring biasing said apparatus toward said clamped position;

a releasable retaining mechanism for holding said apparatus in its unclamped position when placed in said unclamped position;

said retaining mechanism being released when the at least one shoulder of the blade engages said apparatus as the blade shank portion is inserted into said opening and slot a predetermined distance to thereby place said clamping apparatus in said clamped position;

said clamping apparatus engaging the at least one shoulder and pushing the blade shank portion outwardly therefrom when said retaining mechanism is moved to said unclamped position;

said clamping apparatus further comprising:

a hollow generally cylindrical inner sleeve configured to fit around the plunger and having structure engaging the slot so that said inner sleeve is axially movable and non-rotatable relative to the plunger, and having at least one outwardly extending protrusion and an inner ramp surface at its forward end that is axially oriented and inclined radially outwardly in the rearward direction;

a hollow generally cylindrical outer sleeve configured to fit around said inner sleeve and move circumferentially and axially relative thereto, said outer sleeve having a circumferentially extending elongated slot with a transverse axially extending slot extension and at least one recess in the inside surface thereof forming a diagonal wall that extends at least through the same arc as the length of said circumferential slot and is diagonally oriented toward the front of said outer sleeve from said end of said elongated slot that has said transverse extension to said opposite end for contacting said protrusion

therein, said recess diagonal wall causing said outer sleeve to rotate relative to said inner sleeve responsive to forward axial movement of said inner sleeve;

a pin secured to the plunger and engaging said slot of said outer sleeve and limiting rotational movement of said outer sleeve between the ends of said circumferentially extending slot and axially between the ends of said transverse axially extending slot extension;

a compression spring having one end effectively restrained by the plunger and positioned to bias said inner sleeve forwardly;

a detente positioned in the plunger rod aperture and configured to engage the hole in the blade and thereby firmly hold the blade in said apparatus when urged into contact with the blade;

said inner sleeve being biased to move forwardly when the blade is inserted into the slot and said inner and outer sleeves said predetermined distance, whereby said outer sleeve is released to rotate relative to said inner sleeve, causing said inner sleeve to move forwardly and engage said detente to move it into the hole in the blade and firmly hold the blade in the apparatus;

the blade being ejected when the outer sleeve is manually rotated in the opposite direction to its position before it was released by insertion of the blade.

6. (Original) A clamping apparatus as defined in claim 5 wherein said inner sleeve structure comprises at least one axially oriented rib extending inwardly of the inner surface, said rib engaging the slot of the plunger to thereby preclude rotation of said inner sleeve relative to said plunger.

7. (Original) A clamping apparatus as defined in claim 5 wherein the plunger has a cylindrical end portion that has a reduced diameter relative to the plunger adjacent said end portion to thereby define a shoulder, said apparatus further comprising a spring retainer contacting the rear end of said spring, said spring retainer contacting the plunger shoulder which limits rearward movement of said spring retainer.

8. (Original) A clamping apparatus as defined in claim 5 wherein said detente has a generally cylindrical configuration with a generally truncated conical first end for insertion in the hole and a generally curved second end for being engaged by said

inner sleeve.

9. (Original) A clamping apparatus as defined in claim 5 wherein said second end has a generally hemispherically shape.

10. (Original) A clamping apparatus as defined in claim 5 wherein said predetermined distance is the distance sufficient to align said pin in said circumferential slot so that said outer sleeve can rotate relative to said inner sleeve.

11. (Original) A clamping apparatus as defined in claim 5 wherein said circumferential slot is oriented in a plane that is substantially perpendicular to the axis of said outer sleeve.

12. (Original) A clamping apparatus as defined in claim 5 wherein said spring is a compression spring having an inner diameter slightly larger than the diameter of the plunger end portion.

13. (Original) A clamping apparatus as defined in claim 5 wherein said inner sleeve has two protrusions that are diametrically opposite one another and said outer sleeve has two recesses defining a diagonal wall.

14. (Original) A clamping apparatus as defined in claim 5 wherein said diagonal recess extends from the length of said wall rearwardly in the axial direction to the rear end of said outer sleeve.

15. (Original) A clamping apparatus as defined in claim 4 wherein the plunger has a cylindrical end portion and said clamping apparatus further comprises:

a hollow generally cylindrical clamping collar configured to fit around the plunger and be rotatable relative to the plunger, and having at least one axially oriented recess extending at least part of the length thereof and an inner cam surface that begins at the inside surface thereof and increases in radius through a first predetermined circumferential arc in a first direction;

a hollow generally cylindrical control sleeve configured to fit around said clamping collar, said control being rotatable and having an inwardly directed axial rib extending at least a portion of its length, said rib engaging said axial recess of said clamping collar to rotational lock said clamping collar and said control sleeve together, said control sleeve having a circumferentially extending elongated slot with a transverse

axially extending slot extension;

a pin secured to the plunger and engaging said slot of said control sleeve and limiting rotational movement of said control sleeve between the ends of said circumferentially extending slot and axially between the ends of said transverse axially extending slot extension;

a torsion spring having one end restrained by the plunger and its opposite end retained by said control sleeve;

a compression spring effectively restrained by the plunger for biasing said control sleeve toward the forward direction;

a detente positioned in the plunger rod aperture and configured to engage the hole in the blade and thereby firmly hold the blade in said apparatus when urged into contact with the blade;

said control sleeve being biased by said torsion spring to rotate said clamping collar when the blade is inserted into the slot and said clamping collar and control sleeve said predetermined distance, whereby said control sleeve is released to rotate relative to said plunger, causing said clamping collar to rotate so that said cam surface engages said detente to move it into the hole in the blade and firmly hold the blade in the apparatus;

the blade being ejected when the control sleeve is manually rotated in the opposite direction to its position before it was released by insertion of the blade.

16. (Original) A clamping apparatus as defined in claim 15 further comprising a support ring with an aperture therein positioned on the plunger end configured to contact the rear surface of said control sleeve and the forward end of said compression spring.

17. (Original) A clamping apparatus as defined in claim 16 wherein the plunger has a cylindrical end portion that has a reduced diameter relative to the plunger adjacent said end portion to thereby define a shoulder, said apparatus further comprising a spring retainer contacting the rear end of said compression spring, said spring retainer contacting the plunger shoulder which limits rearward movement of said spring retainer.

18. (Original) A clamping apparatus as defined in claim 15 wherein said control sleeve has a forward annular end wall with an opening therein that is slightly

larger than the diameter of the plunger end portion, said end wall being configured to contact the at least one shoulder of the blade.

19. (Original) A clamping apparatus as defined in claim 15 wherein said torsion spring has an axially aligned front end leg and said clamping collar has an axially oriented aperture therein positioned to receive said front end leg for biasing said clamping collar in said first direction.

20. (Original) A clamping apparatus as defined in claim 4 wherein the plunger has a cylindrical end portion and said clamping apparatus further comprises:

a hollow generally cylindrical control sleeve configured to fit around the plunger, said control sleeve being axially movable relative to the plunger, said control sleeve having an elongated axially oriented aperture therein and an annular recess oriented in a plane perpendicular to the axis thereof and extending around a substantial portion of the outside surface near its front, said recess merging with a transverse axially oriented recess extending in the rearward direction;

a hollow generally cylindrical clamping collar configured to fit around said control sleeve and being rotatable relative to the plunger and control sleeve, said clamping collar having an inward protrusion configured to engage said annular recess and said transverse recess, said clamping collar having an elongated slot extending around at least part of the circumference thereof and an inner cam surface that begins at the inside surface thereof and increases in radius through a first predetermined circumferential arc in a first direction;

a pin secured to the plunger and engaging said aperture of said control sleeve to permit axial movement thereof and prevent rotation thereof, said pin being positioned in said slot of said clamping collar to prevent axial movement and limit rotational movement thereof between the ends of said circumferentially extending slot;

a torsion spring having one end restrained by the plunger and its opposite end operatively connected to said control sleeve;

a compression spring effectively restrained by the plunger for biasing said control sleeve in the forward direction;

a detente positioned in the plunger aperture and configured to engage the hole in

the blade and thereby firmly hold the blade in said apparatus when urged into contact with the blade;

said clamping collar being biased by said torsion spring to rotate said clamping collar when the blade is inserted into said clamping collar and control sleeve said predetermined distance, whereby said control sleeve is moved rearwardly until said protrusion moves from said transverse recess to said annular recess, which releases said clamping collar to rotate relative to said control sleeve and the plunger, causing said cam surface to engage said detente and move it into the hole in the blade and firmly hold the blade in the apparatus;

the blade being ejected when the clamping collar is manually rotated in the opposite direction to its position before it was released by insertion of the blade.

21. (Original) A clamping apparatus as defined in claim 20 wherein said transverse recess extends to the rear end of said control sleeve.

22. (Original) A clamping apparatus as defined in claim 20 wherein said annular recess is in a plane perpendicular to the axis of said control sleeve.

23. (Original) A clamping apparatus as defined in claim 20 wherein said first predetermined arc is within the range of about 50 degrees to about 90 degrees.

24. (Original) A clamping apparatus as defined in claim 20 further comprising a support ring with an aperture therein positioned on the plunger end portion configured to contact the rear surface of said clamping collar, said support ring being coupled to said clamping collar so that they rotate together, said torsion spring having an axially oriented front end leg that is inserted into said support ring aperture.

25. (Original) A clamping apparatus as defined in claim 20 wherein the plunger has a cylindrical end portion that has a reduced diameter relative to the plunger adjacent said end portion to thereby define a shoulder, said apparatus further comprising a spring retainer contacting the rear end of said compression spring, said spring retainer contacting the plunger shoulder which limits rearward movement of said spring retainer, said compression spring biasing said control sleeve in the forward direction.